## **Declaration and Power of Attorney for Patent Application** English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and

joint inventor (if	plural names are on the invention	entitled:	ject matter which is claimed ar	
PLATING BA	TH AND METH	OD FOR DEPOSITI	NG A METAL LAYER ON	A SUBSTRATE
the specification	n of which			
(check one)				
[ <u>]</u>	is attached here was filed on Application No. and was amend	October 2, 2001 09/970,271	_ as United States Application	No. or PCT
including the C	laims, as amende	d by any amendment	contents of the above identifie eferred to above.	
known to me to	o be material to p	aternability as dolling .	Patent and Trademark Office n Title 37, Code of Federal Re	
365(b) of any International a and have also certificate or F	foreign application application which of identified below, PCT International	designated at least one	Inited States Code, Section 11 or's certificate, or Section 365( country other than the United ny foreign application for paterng date before that of the appli	States, listed below
priority is clair	пеи. Application(s)			Priority Not Claimed
(Number		(Country)	(Day/Month/Year Filed)	_ []
(Number	)	(Country)	(Day/Month/Year Filed)	[]
<b>,</b>		(Country)	(Day/Month/Year Filed)	[]
(Number	Γ)	(Country)		

	/Ciling	Data
(Application Serial No.)	(Filing	Date)
(Application Serial No.)	(Filing	Date)
(Application Serial No.)	(Filing	Date)
I hereby claim the benefit under 35 U.S.0 365(c) of any PCT International applications subject matter of each of the claims of the common of t	ion designating the chicalosed	n the prior United States or PCT
International application in the manner packnowledge the duty to disclose to the to me to be material to patentability as disclose the filing date of the prior application:	United States Patent and Trad	of 35 Ú.S.C. Section 112, I emark office all information known ion 1 56 which became available
International application in the marrier packnowledge the duty to disclose to the to me to be material to patentability as disclose the filing date of the prior application in the marrier packnowledge the prior application in the marrier packnowledge to the prior application in the marrier packnowledge to the prior application in the marrier packnowledge to the pa	United States Patent and Trad	of 35 Ú.S.C. Section 112, l emark office all information known ion 1.56 which became available
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

connected therewith.	(list name and registration numbe		Reg. No. 38,256
David G. Conlin George W. Neuner Linda M. Buckley Peter J. Manus Peter F. Corless Cara Z. Lowen William J. Daley, Jr. Steven M. Jensen John B. Alexander	Reg. No. 26,964 Reg. No. 31,003 Reg. No. 26,766 Reg. No. 33,860 Reg. No. 38,227	Christine C. O'Day Robert L. Buchanan David E. Tucker Lisa Swiszcz Hazzard George W. Hartnell Kathleen Carr Stewart L. Gitler Kathryn A. Piffat	Reg. No. 40,927 Reg. No. 27,840 Reg. No. 44,368 Reg. No. 42,639 Reg. No. 41,658 Reg. No. 31,256 Reg. No. 34,901
	S. Matthew Cairns John J. Piskorski Darryl P. Frickey	Reg. No. 42,378 Reg. No. 35,647 Reg. No. 34,603	

Send Correspondence to:

John J. Piskorski

c/o EDWARDS & ANGELL, LLP

Dike, Bronstein, Roberts & Cushman, IP Group

130 Water Street

Boston, Massachusetts 02109

USA

Direct Telephone Calls to:

John J. Piskorski

(name and telephone number)

(508) 229-7662 Telephone: (508) 229-0254 Facsimile:

Full name of sole or first inventor	
Andrew J. COBLEY Sole or first inventor's signature	Date:
Residence	
7 Henderson Close, Allesley Village, Coventry CV5 9EY, Great Britain	
Citizenship	
United Kingdom	
Post Office Address	
Same As Above	

Full name of second inventor	
Mark J. KAPECKAS Second inventor's signature	Date:
Residence	
33 Broad Street, Marlborough, Massachusetts 01752, U.S.A.	
Citizenship	
U.S.A. Post Office Address	
Same As Above	

Full name of third inventor	
Erik REDDINGTON	Date:
Third inventor's signature	
Residence	
24 Annetta Road, Ashland, Massachusetts 01721, U.S.A.	
Citizenship	
11.0.4	
U.S.A.  Post Office Address	
Same As Above	
for the inventor	
Full name of sole or fourth inventor	
Wade SONNENBERG	Date:
Fourth inventor's signature	
Residence	
RR1 472C, Edgartown, Massachusetts 02539, U.S.A.	
Citizenship	
U.S.A. Post Office Address	
Same As Above	
Full name of fifth inventor	
Leon R. BARSTAD	Date:
Fifth inventor's signature	Date:
Residence	
8 Regan Circle, Raynham, Massachusetts 02767, U.S.A.	
8 Regan Circle, Raynnam, Massacruseus 02707, 0.0%	
United States of America	
Post Office Address	
Same As Above	

Full name of sixth inventor	
Thomas BUCKLEY Sixth inventor's signature	Date:
TIMA	11-5-01
Residence	
736 Washington Street, Dedham, Massachusetts 02026, U.S.A.	
Citizenship	_
U.S.A.	
Post Office Address	
Same As Above	

Docket No. 50799 Page 1 of 5

# **Declaration and Power of Attorney for Patent Application English Language Declaration**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and

joint inventor (if f	on the invention 6	entitled:	ject matter which is claim	
PLATING BAT	TH AND METH	OD FOR DEPOSITI	NG A METAL LAYER	ON A DODDE
the specification	of which			
(check one)				
[X]	is attached heretowas filed on (Application No and was amended.	09/9/ 0,211	_ as United States Applic	ation No. or PCT
including the c	laims, as amende	a by any -		Office all information
known to me t	o be material to be	Alcinos	s Patent and Trademark ( in Title 37, Code of Feder	
365(b) of any International a and have also certificate or I	application which on identified below, PCT International	designated at least one	United States Code, Section tor's certificate, or Section e country other than the United the foreign application for ing date before that of the	natent or inventor's
priority is clan	mea.			<b>Priority Not Claimed</b>
Prior Foreign	Application(s)		(Day/Month/Year	[]
(Number	)	(Country)	(Day/Month in Today	,
(Numbe	r)	(Country)	(Day/Month/Year	Filed)
(Numbe	er)	(Country)	(Day/Month/Year	Filed)

I hereby claim the benefit under 35 U.S.C listed below:	. Section 119(e) of any United Sta	ates provisional application(s)
(Application Serial No.)	(Filing Da	ite)
(Application Serial No.)	(Filing Da	ate)
(Application Serial No.)	(Filing Da	ate)
I hereby claim the benefit under 35 U.S.(365(c) of any PCT International application subject matter of each of the claims of the International application in the manner packnowledge the duty to disclose to the to me to be material to patentability as disclose the filing date of the prior application:	nis application is not disclosed in the provided by the first paragraph of 3 United States Patent and Tradem	the prior United States or PCT 35 U.S.C. Section 112, I park office all information known 1.56 which became available
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

	ame and registration numi		
George W. Neuner Reg Linda M. Buckley Reg Peter J. Manus Reg Peter F. Corless Reg Cara Z. Lowen Reg William J. Daley, Jr. Reg Steven M. Jensen Reg	g. No. 27,026 g. No. 26,964 g. No. 31,003 g. No. 26,766 g. No. 33,860 g. No. 38,227 g. No. 35,487 g. No. 42,693 g. No. 48,399	Christine C. O'Day Robert L. Buchanan David E. Tucker Lisa Swiszcz Hazzard George W. Hartnell Kathleen Carr Stewart L. Gitler Kathryn A. Piffat	Reg. No. 38,256 Reg. No. 40,927 Reg. No. 27,840 Reg. No. 44,368 Reg. No. 42,639 Reg. No. 41,658 Reg. No. 31,256 Reg. No. 34,901
	S. Matthew Cairns John J. Piskorski Darryl P. Frickey	Reg. No. 42,378 Reg. No. 35,647 Reg. No. 34,603	
Send Correspondence to:	Dike, Brons 130 Water S	DS & ANGELL, LLP tein, Roberts & Cushman, l	P Group
Direct Telephone Calls to: (name and telephone numi	John J. Pisl ber) Telephone: Facsimile:		
Full name of sole or first inver	ntor		
Andrew J. COBLEY Sole or first inventor's signatu Residence	y Hald	OEV Great Britain	Date: 5 / 1 ( / O 1
7 Henderson Close, Allesl Citizenship	ey Village, Coventry CV5	SET, Great Britain	
United Kingdom Post Office Address			
Same As Above			
Full name of second inventor	or		
Mark J. KAPECKAS Second inventor's signature			Date:
Second liveling a signature			
Residence			

Post Office Address
Same As Above

U.S.A.

Chi. Linconfor	
Full name of third inventor	
Erik REDDINGTON	Date:
Third inventor's signature	1
Residence	
24 Annetta Road, Ashland, Massachusetts 01721, U.S.A.	
Citizenship	
U.S.A. Post Office Address	
Same As Above	
Full name of sole or fourth inventor	
Wade SONNENBERG	I Data:
Fourth inventor's signature	Date:
Residence	
RR1 472C, Edgartown, Massachusetts 02539, U.S.A.	
RR1 472C, Edgartown, Massachusetts 02333, 0.3.7.	
Cilizenship	
U.S.A.	
Post Office Address	
Same As Above	
	·
Full name of fifth inventor	
D DADSTAD	
Leon R. BARSTAD Fifth inventor's signature	Date:
, and investor a significant	
Residence	
8 Regan Circle, Raynham, Massachusetts 02767, U.S.A.	
Citizenship	
United States of America	
Post Office Address	
Same As Above	

Date:
54.0
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Docket No. 50799 Pag 1 of 5

## **Declaration and Power of Attorney for Patent Application** English Language Declaration

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I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

	on the inventor			
PLATING BA	TH AND MET	HOD FOR DEPOSIT	ING A METAL LAYER ON	A SUBSTRATE
the specification	of which			
(check one)				
[ ] [X]	Application No. and was amend	October 2, 2001 09/970,271 ded on (if ap	as United States Application	
including the cl	aims, as ameno	ed by any amendment	e contents of the above identifie referred to above.	
I acknowledge known to me to 1.56.	the duty to disclobe material to p	ose to the United State patentability as defined	s Patent and Trademark Office in Title 37, Code of Federal Re	
365(b) of any f	foreign application pplication which identified below PCT International	designated at least on	United States Code, Section 11 htor's certificate, or Section 365( e country other than the United any foreign application for pater ling date before that of the appli	States, listed below at or inventor's cation on which
Prior Foreign	Application(s)			Priority Not Claimed
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(Number		(Country)	(Day/Month/Year Filed)	[]
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	(Filing	g Date)
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(Application Serial No.)	(Filin	g Date)
(Application Serial No.)	(Filin	g Date)
I hereby claim the benefit under 35 U.S. 365(c) of any PCT International applicat subject matter of each of the claims of the International application in the manner process.	ion designating the Office Science	in the prior United States or PCT
acknowledge the duty to disclose to the to me to be material to patentability as obstween the filing date of the prior appliapplication:	United States Patent and Tra	demark office all information known
acknowledge the duty to disclose to the to me to be material to patentability as obetween the filing date of the prior appli	United States Patent and Tra	demark office all information known ction 1.56 which became available I International filing date of this (Status)
acknowledge the duty to disclose to the to me to be material to patentability as obetween the filing date of the prior appliapplication:	United by the first paragraph United States Patent and Tra defined in Title 37, C.F.C., Sec cation and the national or PC	demark office all information known ction 1.56 which became available I International filing date of this

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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connected therewith.  David G. Conlin George W. Neuner Linda M. Buckley Peter J. Manus Peter F. Corless Cara Z. Lowen William J. Daley, Jr. Steven M. Jensen John B. Alexander	(list name and registration number Reg. No. 27,026 Reg. No. 26,964 Reg. No. 31,003 Reg. No. 26,766	Christine C. O'Day Robert L. Buchanan David E. Tucker Lisa Swiszcz Hazzard George W. Hartnell Kathleen Carr Stewart L. Gitler Kathryn A. Piffat	Reg. No. 38,256 Reg. No. 40,927 Reg. No. 27,840 Reg. No. 44,368 Reg. No. 42,639 Reg. No. 41,658 Reg. No. 31,256 Reg. No. 34,901
	Reg. No. 33,860 Reg. No. 38,227 Reg. No. 35,487 Reg. No. 42,693 Reg. No. 48,399		
	S. Matthew Cairns John J. Piskorski Darryl P. Frickey	Reg. No. 42,378 Reg. No. 35,647 Reg. No. 34,603	
	. John I Diskore	ski	

Send Correspondence to:

John J. Piskorski

c/o EDWARDS & ANGELL, LLP

Dike, Bronstein, Roberts & Cushman, IP Group

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Direct Telephone Calls to: (name and telephone number) John J. Piskorski

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Facsimile:

Andrew J. COBLEY Sole or first inventor's signature	Date:
Residence 7 Henderson Close, Allesley Village, Coventry CV5 9EY, Great Britain Citizenship	
United Kingdom Post Office Address Same As Above	

Odine / 16 / 160 / 1	
Full name of second inventor	
Mark J. KAPECKAS Second inventor's signature Residence  33 Broad Street, Marlborough, Massachusetts 01752, U.S.A.	Date:
Citizenship	
U.S.A. Post Office Address	
Same As Above	

Full name of third inventor	
Erik REDDINGTON	Deter
Third inventor's signature	Date:
<i>P</i>	11/1/01
Residence	
24 Annetta Road, Ashland, Massachusetts 01721, U.S.A.	
Citizenship	
U.S.A.	
U.S.A. Post Office Address	
Same As Above	
Full name of sole or fourth inventor	
W A CONNENDEDC	
Wade SONNENBERG Fourth inventor's signature	Date:
Pourul livelior 3 signatur	11/1/61
100	
Residence	
RR1 472C, Edgartown, Massachusetts 02539, U.S.A.	
Citizenship	
1	
U.S.A.	
Post Office Address	
Same As Above	
Full name of fifth inventor	
Leon R. BARSTAD	Date:
Fifth inventor's signature	11/1/01
Landy -	(1, 1, 1
Residence	
8 Regan Circle, Raynham, Massachusetts 02767, U.S.A.	
Citizenship	
United States of America	
Post Office Address	
Same As Above	
Sallie As Above	

Full name of sixth inventor	
Thomas BUCKLEY	Date:
Sixth inventor's signature	Date.
Given in the control of the control	
D.::1	
Residence	
Massachusetts 02026 ILS A	
736 Washington Street, Dedham, Massachusetts 02026, U.S.A.	
Citizenship	
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U.S.A.	
Post Office Address	
1 Oot Olling Vingings	
Same As Above	
Salle As Above	



APRIL 05, 2002

EDWARDS & ANGELL, LLP PETER F. CORLESS P.O. BOX 9169 BOSTON, MA 02209 RECEIVED

APR 1 1 2002

EDWARDS & ANGELL LLP DIKE BRONSTEIN ROBERTS CUSHMAN Chief Information Officer Washington, DC 20231 www.uspto.gov



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UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/04/2002

REEL/FRAME: 012552/0957

NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

COBLEY, ANDREW J.

DOC DATE: 11/05/2001

ASSIGNOR:

KAPECKAS, MARK J.

DOC DATE: 11/01/2001

ASSIGNOR:

REDDINGTON, ERIK

DOC DATE: 11/01/2001

ASSIGNOR:

SONNENBERG, WADE

DOC DATE: 11/01/2001

ASSIGNOR:

BARSTAD, LEON R.

DOC DATE: 11/01/2001

ASSIGNOR:

BUCKLEY, THOMAS

DOC DATE: 11/03/2001

ASSIGNEE:

SHIPLEY COMPANY, L.L.C. 455 FOREST STREET MARLBOROUGH, MASSACHUSETTS 01752

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Rev. 03-01) MB No. 0651-0027 (exp.5/31/2002) MB No. 0651-0027 (exp.5/31/2002)	_
Tab settings → → ↑ 101979  To the Honorable Commissioner of Patents and Trademarks: F	920 the bad original documents or copy thereof.
To the Honorable Commissioner of Patents and Trademarks: F	Please record the attached original documents of copy are con-
Name of conveying party(ies):	Name and address of receiving party(ies):
Andrew J. COBLEY Thomas BUCKLEY	Name: Shipley Company, L.L.C.
Mark J. KAPECKAS Erik REDDINGTON Wade SONNENBERG  2-4-07	Address: 455 Forest Street
Leon R. BARSTAD	
Additional names(s) of conveying party(ies)	
3. Nature of conveyance:	
	344
☐ Security Agreement ☐ Change of Name	City: Marlborough State/Prov.: MA
D. Others	Country: U.S.A. ZIP: 01752
Other	
Execution Date: November 3, 2001 (completed)	Additional name(s) & address(es)
4. Application number(s) or patent numbers(s):	and the state of t
If this document is being filed together with a new application	, the execution date of the application is.
Patent Application No. Filing date	B. Patent No.(s)
, a.a	
09/970,271 October 2, 2001	
02/06/2002 TGEDANUI 00000168 09970271	
02 FC:581 40.00 BP	
Additional numbers	Yes 🛛 No
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
Name: Peter F. Corless	7. Total fee (37 CFR 3.41):\$ 40.00
Registration No. 33,860	☑ Enclosed - Any excess or insufficiency should be
	credited or debited to deposit account
Address: EDWARDS & ANGELL, LLP	☐ Authorized to be charged to deposit account
Dike, Bronstein, Roberts & Cushman, IP Group	
P.O. Box 9169	8. Deposit account number:
City: Boston State/Prov.: MA	04-1105
0.2200	(Attach duplicate copy of this page if paying by deposit account)
	THE THE SPACE
	USE THIS SPACE
	mation is true and correct and any attached copy is a true copy
of the original document.	1/08/02
Peter F. Corless	Signature
Name of Person Signing	Signature g cover sheet, attachments, and
	LOVE SHEET, attachments, and

Docket No.: 50799

### **ASSIGNMENT**

WHEREAS, I, Andrew J. Cobley of West Midlands, England, I, Mark J. Kapeckas of Marlborough, Massachusetts, I, Erik Reddington of Ashland, Massachusetts, I, Wade Sonnenberg of Edgartown, Massachusetts, I, Leon R. Barstad of Raynham, Massachusetts and I, Thomas Buckley of Dedham, Massachusetts, (hereinafter referred to as "Assignors"), have invented certain new and useful improvements in "PLATING BATH AND METHOD FOR DEPOSITING A METAL LAYER ON A SUBSTRATE", for which an application for United States Letters Patent with the same title was filed with the U.S. Patent and Trademark Office on October 2, 2001 and assigned U.S. Application Serial No. 09/970,271, and

WHEREAS, Shipley Company, L.L.C., located at 455 Forest Street, Marlborough, Massachusetts 01752, (hereinafter referred to as the "Assignee"), is desirous of acquiring the entire right, title and interest in and to the same invention, and in and to the said application, and any Letters Patent that may issue thereon;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for the above consideration, the Assignors have assigned and transferred, and do hereby assign and transfer to the Assignee, its successors and assigns, their entire right, title and interest for the United States in and to the said invention and in and to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, in whole or in part, re-examinations, and extensions thereof, and all applications claiming priority therefrom; and the Assignors hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as their interest is concerned, to the Assignee; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said invention may issue, to the same extent as the Assignors would hold and enjoy if this Assignment had not been made.

The Assignors also have assigned and transferred, and do hereby assign and transfer to the Assignee, its successors and assigns, their entire right, title and interest in and to the invention disclosed in said application, in all countries of the world foreign to the United States, including the right to file applications and obtain patents for said invention in its own name in said countries and including all rights of priority in said countries under the terms of any applicable international convention; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said invention may issue, to the same extent as the Assignors would hold and enjoy if this Assignment had not been made.

The Assignors further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights, and also agree, at the request of the Assignee, to testify in any legal proceedings, sign all lawful papers, make all lawful oaths, and generally do everything possible to aid said Assignee, its successors and assigns, to obtain, maintain and enforce patent protection for said invention in all countries.

The Assignors also hereby grant the law firm of EDWARDS & ANGELL, LLP, Dike, Bronstein, Roberts & Cushman, IP Group, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, the Assignors have caused this Assignment to be executed.

Dated this Siday of Noverclus, 2001.	Malle
Dated this, day of,,	Andrew J. COBLEY
	Mark J. KAPECKAS
Dated this,,	Erik REDDINGTON
Dated this,	Wade SONNENBERG
Dated this,,	
Dated this,,	Leon R. BARSTAD
	Thomas BUCKLEY

### **ASSIGNMENT**

WHEREAS, I, Andrew J. Cobley of West Midlands, England, I, Mark J. Kapeckas of Marlborough, Massachusetts, I, Erik Reddington of Ashland, Massachusetts, I, Wade Sonnenberg of Edgartown, Massachusetts, I, Leon R. Barstad of Raynham, Massachusetts and I, Thomas Buckley of Dedham, Massachusetts, (hereinafter referred to as "Assignors"), have invented certain new and useful improvements in "PLATING BATH AND METHOD FOR DEPOSITING A METAL LAYER ON A SUBSTRATE", for which an application for United States Letters Patent with the same title was filed with the U.S. Patent and Trademark Office on October 2, 2001 and assigned U.S. Application Serial No. 09/970,271, and

WHEREAS, Shipley Company, L.L.C., located at 455 Forest Street, Marlborough, Massachusetts 01752, (hereinafter referred to as the "Assignee"), is desirous of acquiring the entire right, title and interest in and to the same invention, and in and to the said application, and any Letters Patent that may issue thereon;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for the above consideration, the Assignors have assigned and transferred, and do hereby assign and transfer to the Assignee, its successors and assigns, their entire right, title and interest for the United States in and to the said invention and in and to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, in whole or in part, re-examinations, and extensions thereof, and all applications claiming priority therefrom; and the Assignors hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as their interest is concerned, to the Assignee; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said invention may issue, to the same extent as the Assignors would hold and enjoy if this Assignment had not been made.

The Assignors also have assigned and transferred, and do hereby assign and transfer to the Assignee, its successors and assigns, their entire right, title and interest in and to the invention disclosed in said application, in all countries of the world foreign to the United States, including the right to file applications and obtain patents for said invention in its own name in said countries and including all rights of priority in said countries under the terms of any applicable international convention; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said invention may issue, to the same extent as the Assignors would hold and enjoy if this Assignment had not been made.

The Assignors further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights, and also agree, at the request of the Assignee, to testify in any legal proceedings, sign all lawful papers, make all lawful oaths, and generally do everything possible to aid said Assignee, its successors and assigns, to obtain, maintain and enforce patent protection for said invention in all countries.

The Assignors also hereby grant the law firm of EDWARDS & ANGELL, LLP, Dike, Bronstein, Roberts & Cushman, IP Group, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, the Assignors have caused this Assignment to be executed.

Dated this,	
Dated this day of wover BER, 2001	Andrew J. COBLEY  Mark J. KAPECKAS
Dated this day ofNouEmber, 2001.	Erik REDDINGTON
Dated this day of Nurely,	Wade SONNENBERG
Dated this \ day of November , 2001.	Λ
Dated this,	Thomas BUCKLEY

## **ASSIGNMENT**

WHEREAS, I, Andrew J. Cobley of West Midlands, England, I, Mark J. Kapeckas of Marlborough, Massachusetts, I, Erik Reddington of Ashland, Massachusetts, I, Wade Sonnenberg of Edgartown, Massachusetts, I, Leon R. Barstad of Raynham, Massachusetts and I, Thomas Buckley of Dedham, Massachusetts, (hereinafter referred to as "Assignors"), have invented certain new and useful improvements in "PLATING BATH AND METHOD FOR DEPOSITING A METAL LAYER ON A SUBSTRATE", for which an application for United States Letters Patent with the same title was filed with the U.S. Patent and Trademark Office on October 2, 2001 and assigned U.S. Application Serial No. 09/970,271, and

WHEREAS, Shipley Company, L.L.C., located at 455 Forest Street, Marlborough, Massachusetts 01752, (hereinafter referred to as the "Assignee"), is desirous of acquiring the entire right, title and interest in and to the same invention, and in and to the said application, and any Letters Patent that may issue thereon;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for the above consideration, the Assignors have assigned and transferred, and do hereby assign and transfer to the Assignee, its successors and assigns, their entire right, title and interest for the United States in and to the said invention and in and to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, in whole or in part, re-examinations, and extensions thereof, and all applications claiming priority therefrom; and the Assignors hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as their interest is concerned, to the Assignee; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said invention may issue, to the same extent as the Assignors would hold and enjoy if this Assignment had not been made.

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The Assignors further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights, and also agree, at the request of the Assignee, to testify in any legal proceedings, sign all lawful papers, make all lawful oaths, and generally do everything possible to aid said Assignee, its successors and assigns, to obtain, maintain and enforce patent protection for said invention in all countries.

The Assignors also hereby grant the law firm of EDWARDS & ANGELL, LLP, Dike, Bronstein, Roberts & Cushman, IP Group, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, the Assignors have caused this Assignment to be executed.

Dated this	_ day of	,	
			Andrew J. COBLEY
Dated this	_ day of	.,	
			Mark J. KAPECKAS
Dated this	_ day of	·	
			Erik REDDINGTON
Dated this	day of	_,·	
			Wade SONNENBERG
Dated this	day of	_,	
			Leon R. BARSTAD
Dated this 2	day of November	<u>, 2001.</u>	TIMA
			Thomas BUCKLEY